

Notice of Allowability

Application No.

10/822,398

Examiner

Brij B. Shrivastav

Applicant(s)

CROZIER ET AL.

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Application filed on April 12, 2004.
2. ☒ The allowed claim(s) is/are 1-33.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 4/12/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: ✓

Claims 1-6 are allowed, as the prior art of record does not teach or suggest a method for designing apparatus for use in a magnetic resonance system for receiving a magnetic resonance signal having a predetermined radiofrequency, said apparatus and said magnetic resonance system having a common longitudinal axis, said method comprising designing the apparatus by treating the apparatus as a transmitter of a radio frequency field having the predetermined radio frequency and then designing said transmitter by calculating locations on the specified cylindrical surface for the set of inductive elements by contouring the function $n.S$, in combination with the remaining limitations of the claims.

Claims 7-12 are allowed, as the prior art of record does not teach or suggest a method for designing apparatus for use in a magnetic resonance system for transmitting a radio frequency field or both transmitting a radio frequency field and receiving a magnetic resonance signal, said apparatus and said magnetic resonance system having a common longitudinal axis, the method including step of calculating locations on the specified cylindrical surface for the set of inductive elements by contouring the function $n.S$, in combination with the remaining limitations of the claims.

Claims 13-21 are allowed, as the prior art of record does not teach or suggest a method for designing apparatus for use in magnetic resonance system for receiving a magnetic resonance signal having a predetermined radio frequency, said apparatus and said magnetic resonance system having a common longitudinal axis, said method

Art Unit: 2859

comprising designing the apparatus by treating the apparatus as a transmitter of a radio frequency field having the predetermined radio frequency and then designing said transmitter by converting the complex current density function into a set of capacitive elements located on the specified cylindrical surface and a set of inductive elements located on the specified cylindrical surface, in combination with the remaining limitations of the claims.

Claims 22-30 are allowed, as the prior art of record does not teach or suggest a method for designing apparatus for use in a magnetic resonance system for transmitting a radio frequency field or both transmitting a radio frequency field receiving a magnetic resonance signal, said apparatus and said apparatus and said magnetic resonance system having a common longitudinal axis, the method having step of converting the first and second complex current density functions into sets of capacitive elements and sets of inductive elements located on the specified cylindrical surface, in combination with the remaining limitations of the claims.

Claims 31-33 are allowed, as the prior art of record does not teach or suggest method for converting a complex current density function J into sets of capacitive and inductive elements located on a cylindrical surface, including calculating locations on the cylindrical surface for the set of inductive elements by contouring the function $n \cdot S$, in combination with the remaining limitations of the claims.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

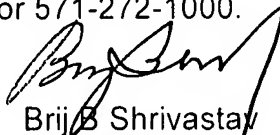
accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brij B. Shrivastav whose telephone number is 571-272-2250. The examiner can normally be reached on 7 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. F. Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 17, 2007.


Brij B Shrivastav
Primary Examiner
Art Unit 2859